



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/170,724	10/14/1998	TAKASHI NAKATSUYAMA	7217/57094	7105

7590

03/14/2002

JAY H MAIOLI
COOPER & DUNHAM
1185 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

GAUTHIER, GERALD

ART UNIT

PAPER NUMBER

2645

DATE MAILED: 03/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/170,724

Applicant(s)

NAKATSUYAMA, TAKASHI

Examiner

Gerald Gauthier

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claims 1, 6, 9,15, 21 and 24** are rejected under 35 U.S.C. 102(e) as being anticipated by Barrett et al. U. S. Patent No. 5,917,835 (hereinafter Barrett).

Regarding **claim 1**, Barrett teaches a data distribution system including an information service center (see 10 on FIG. 1) and terminal equipment remote from the information service center (see 30 on FIG. 1) and adapted for distributing a program selected at the terminal equipment from the information service center to the terminal equipment, the information service center comprising:

storage means for storing a plurality of programs (see 18 on FIG. 2) [the digital audio data file is the storage means];

retrieving means for retrieving a desired program selected at the terminal equipment from the plurality of programs stored in the storage means (see 10 on FIG. 2) [the server retrieves the data from the digital audio data file];

dividing means for dividing the desired program retrieved by the retrieving means into an outline part for informing a user of an outline of the desired program and into a supplement part recombina~~b~~le with the outline part for restoring the desired program (see 20 on FIG. 1 and column 6, lines 7-17) [The data are divided into frames for easy transmission]; and

time-division transmission means for time-division transmission of the outline part and the supplement part divided by the dividing means (see 66 on FIG.4 and column 6, lines 18-23) [The modems do the time-division transmissions]; and the terminal equipment comprising:

receiving means for receiving the outline part and the supplement part transmitted from the information service center (see 42 on FIG. 1) [The communication interface is the receiving means];

recombining means for recombining the outline part and the supplement part received by the receiving means (see 32 on FIG. 1 and column 5, lines 55-60) [The recover of different part of the data is done by the computer]; and

reproducing means for reproducing the desired program based on the outline part used for monitoring (see 40 on FIG. 1 and column 5, lines 60-67) [The reproducing means is done by the sound system].

Regarding **claims 6 and 21**, Barrett teaches a data distribution system, wherein, when the supplement part from the information service center begins downloading into the terminal equipment, the outline part is continuously reproduced for monitoring by the user (see column 6, lines 45-50).

Regarding **claim 9**, Barrett teaches an information service center (see 10 on FIG. 1) for distributing a program to terminal equipment, comprising:

storage means for storing a plurality of programs (see 18 on FIG. 2) [the digital audio data file is the storage means];

retrieving means for retrieving a desired program selected at the terminal equipment from the plurality of programs stored in the storage means (see 10 on FIG. 2) [the server retrieves the data from the digital audio data file]; and

dividing means for dividing the desired program retrieved by the retrieving means into an outline part for informing a user of an outline of the desired program and into a supplement part recombinaable with the outline part for restoring the desired program

(see 20 on FIG. 1 and column 6, lines 7-17) [The data are divided into frames for easy transmission].

Regarding **claim 15**, Barrett teaches a terminal equipment (see 30 on FIG. 1) for receiving a .program transmitted from an information service center, comprising:

receiving means for receiving an outline part and a supplement part distributed from the information service center (see 42 on FIG. 1) [The communication interface is the receiving means];

first recombining means for recombining the outline part and the supplement part received by the receiving means (see 32 on FIG. 1 and column 5, lines 55-60) [The recover of different part of the data is done by the computer]; and
reproducing means for reproducing the program based on the outline part for monitoring by a user (see 40 on FIG. 1 and column 5, lines 60-67) [The reproducing means is done by the sound system].

Regarding **claim 24**, Barrett teaches a method of distributing a program between an information service center (see 10 on FIG. 1) and terminal equipment remote (see 30 on FIG. 1) from the information service center, comprising the steps of:

dividing a desired program selected at the terminal equipment into an outline part for informing a user of an outline of the desired program, and into a supplement part recombinable with the outline part for restoring the desired program (see 20 on FIG. 1 and column 6, lines 7-17) [The data are divided into frames for easy transmission];

transmitting in a time-division manner an outline part and a divided supplement part to the terminal equipment (see 66 on FIG.4 and column 6, lines 18-23) [The modems do the time-division transmissions];

receiving the outline part and the supplement distributed from the information service center (see 42 on FIG. 1) [The communication interface is the receiving means];

recombining a received outline art and a received supplement part; and reproducing the desired program based on the outline part for monitoring by the user (see 32 on FIG. 1 and column 5, lines 55-60) [The recover of different part of the data is done by the computer].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 2, 10 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Kitabatake U. S. Patent No. 5,469,474.

Regarding **claims 2 and 10**, Barrett teaches a data distribution system, wherein: the desired program includes audio data (see 18 on FIG. 2).

Barrett as applied to **claims 1 and 9** above differs from **claims 2 and 10** in that Barrett did not disclose dividing the audio data into a plurality of bands having different respective frequency components.

However, Kitabatake teaches

an audio data dividing means for dividing the audio data into a plurality of bands having different respective frequency components (see 11 on FIG. 2); and

encoding means for encoding a frequency component of each of the bands resulting from a division of the audio data by the audio data dividing means by allocating a quantization bit to each one of the frequency components for masking a quantum noise, for providing as the outline part an output corresponding to a first band of the plurality of bands, and for providing as the supplement part an output corresponding to a second band of the plurality of bands (see column 5, line 67 to column 6, line 8).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Barrett by adding dividing the audio data into a plurality of bands having different respective frequency components as taught by Kitabatake.

The modification will allow the system to divide the audio data into a plurality of bands having different respective frequency components such that the frequency band signals would be quantized.

Regarding **claim 16**, Barrett teaches a data distribution system, wherein: the program includes audio data (see 18 on FIG. 2).

Barrett as applied to **claim 15** above differs from **claim 16** in that Barrett did not disclose dividing the audio data into a plurality of bands having different respective frequency components.

However, Kitabatake teaches the audio data is divided into a plurality of bands having different respective frequency components;

a frequency component of each of the bands results from a division of the audio data encoded by allocating a quantization bit to each one of the frequency components for masking a quantum noise (see column 4, lines 24-33); and

a first output corresponding to a first band of the plurality of bands is provided as the outline part while a second output corresponding to a second band of the plurality of bands is provided as the supplement part (see column 4, lines 18-23).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Barrett by adding dividing the audio data into a plurality of bands having different respective frequency components as taught by Kitabatake.

The modification will allow the system to divide the audio data into a plurality of bands having different respective frequency components such that the frequency band signals would be quantized.

5. **Claims 3, 11 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Kim U. S. Patent No. 5,734,657.

Regarding **claims 3, 11 and 18**, Barrett teaches a data distribution system, wherein: the desired program includes audio data (see 18 on FIG. 2).

Barrett as applied to **claims 1, 9 and 15** above differs from **claims 3, 11 and 18** in that Barrett did not disclose the dividing means generates outputs through addition of a plurality of channels for the audio data.

However, Kim teaches the dividing means generates a first output through addition of a plurality of channels for the audio data and a second output through subtraction of the plurality of channels, for providing one of the first output and the second output as the outline part and a remaining output as the supplement part (see column 4, lines 39-43).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Barrett by adding the dividing means generates outputs through addition of a plurality of channels for the audio data as taught by Kim.

The modification will allow the system to have the dividing means generates outputs through addition of a plurality of channels for the audio data such that the audio signals would be a sampled digitally.

6. **Claims 4, 12 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Tsutsui et al. U. S. Patent No. 5,731,767 (hereinafter Tsutsui).

Regarding **claims 4, 12 and 19**, Barrett teaches a data distribution system, wherein: the desired program includes audio data (see 18 on FIG. 2).

Barrett as applied to **claims 1, 9 and 15** above differs from **claims 4, 12 and 19** in that Barrett did not disclose the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum.

However, Tsutsui teaches the dividing means comprises frequency band dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum for providing one of the even spectrum and the odd spectrum as the outline part and a remaining spectrum as the supplement part (see column 14, line 64 to column 15, line 7).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Barrett by adding the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum as taught by Tsutsui.

The modification will allow the system to have the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum such that the respective bands would become in correspondence with the critical bandwidths.

7. **Claims 5, 13 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Tsuga et al. U. S. Patent No. 5,895,124 (hereinafter Tsuga).

Regarding **claims 5, 13 and 20**, Barrett teaches a data distribution system, wherein: the desired program includes audio data (see 18 on FIG. 2).

Barrett as applied to **claims 1, 9 and 15** above differs from **claims 5, 13 and 20** in that Barrett did not disclose dividing the audio data into vocal data and accompaniment data.

However, Tsuga teaches the dividing means divides the audio data into vocal data and accompaniment data for providing one of the vocal data and the accompaniment data as the outline part and remaining data as the supplement part (see column 1, line 64 to column 2, line 6).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Barrett by adding dividing the audio data into vocal data and accompaniment data as taught by Tsuga.

The modification will allow the system to divide the audio data into vocal data and accompaniment data such that the user would be able to select a duet.

8. **Claims 7, 8, 14, 22 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Schoen et al. U. S. Patent No. 5,592,511 (hereinafter Schoen).

Regarding **claims 7 and 22**, Barrett as applied to **claims 1 and 15** above differs from **claims 7 and 22** in that Barrett did not disclose reproduction of the outline part at the terminal equipment for monitoring not counted for billing.

However, Schoen teaches a data distribution system, wherein reproduction of the outline part at the terminal equipment for monitoring is not counted for billing (see column 3, lines 21-30).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Barrett by adding reproduction of the outline part at the terminal equipment for monitoring not counted for billing as taught by Schoen.

The modification will allow the system to have reproduction of the outline part at the terminal equipment for monitoring not counted for billing such that the user would retrieve the data.

Regarding **claims 8, 14 and 23**, Barrett as applied to **claims 1, 9 and 15** above differs from **claims 8, 14 and 23** in that Barrett did not disclose additional lock data for a predetermined billing.

However, Schoen teaches a data distribution system, wherein the information service center transmits to the terminal equipment the supplement part including additional lock data for a predetermined billing and receives from the terminal equipment key data corresponding to the additional lock data, thereby permitting reproduction of the supplement part at the terminal equipment (see column 3, lines 13-18).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Barrett by adding additional lock data for a predetermined billing as taught by Schoen.

The modification will allow the system to have additional lock data for a predetermined billing such that the billing data would be sent to the computer.

9. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Akagiri U. S. Patent No. 5,664,056.

Barrett as applied to **claim 15** above differs from **claim 17** in that Barrett did not disclose converting frequency-axial signals of the outline part and the supplement part respectively distributed from the information service center, to time-axial signals.

However, Akagiri teaches a terminal equipment, further comprising:

converting means for converting frequency-axial signals of the outline part and the supplement part respectively distributed from the information service center, to time-axial signals (see column 9, lines 23-26); and

second recombining means for recombining converted signals from the converting means for band composition (see column 9, lines 26-29).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Barrett by adding converting frequency-axial signals of the outline part and the supplement part respectively distributed from the information service center, to time-axial signals as taught by Akagiri.

The modification will allow the system to convert frequency-axial signals of the outline part and the supplement part respectively distributed from the information service center, to time-axial signals such that the samples on the time axis would be recombined.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Sprague et al. is cited for an apparatus for decoding variable-length encoded data (see FIG. 1).

Ido is cited for a data recording/reproducing method and data send-out method (see FIG. 1).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Gauthier whose telephone number is (703) 305-0981. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.


g.g.
March 7, 2002

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

